

BEST AVAILABLE COPY

| CLAIMS ONLY  |          |      |                        |      |                        |      | SERIAL NO.   | FILING DATE |
|--------------|----------|------|------------------------|------|------------------------|------|--------------|-------------|
|              |          |      |                        |      |                        |      | APPLICANT(S) |             |
| CLAIMS       |          |      |                        |      |                        |      |              |             |
|              | AS FILED |      | AFTER<br>1st AMENDMENT |      | AFTER<br>2nd AMENDMENT |      |              |             |
|              | IND.     | DEP. | IND.                   | DEP. | IND.                   | DEP. |              |             |
| 1            |          | 2    |                        |      |                        |      |              |             |
| 2            |          | 2    |                        |      |                        |      |              |             |
| 3            | 1        |      |                        |      |                        |      |              |             |
| 4            |          | 1    |                        |      |                        |      |              |             |
| 5            |          | 1    |                        |      |                        |      |              |             |
| 6            |          | 1    |                        |      |                        |      |              |             |
| 7            |          | 1    |                        |      |                        |      |              |             |
| 8            |          | 1    |                        |      |                        |      |              |             |
| 9            |          | 1    |                        |      |                        |      |              |             |
| 10           |          | 1    |                        |      |                        |      |              |             |
| 11           |          | 1    |                        |      |                        |      |              |             |
| 12           |          | 1    |                        |      |                        |      |              |             |
| 13           |          | 1    |                        |      |                        |      |              |             |
| 14           |          | 1    |                        |      |                        |      |              |             |
| 15           |          | 1    |                        |      |                        |      |              |             |
| 16           |          | 1    |                        |      |                        |      |              |             |
| 17           |          | 1    |                        |      |                        |      |              |             |
| 18           |          | 1    |                        |      |                        |      |              |             |
| 19           |          | 1    |                        |      |                        |      |              |             |
| 20           |          | 1    |                        |      |                        |      |              |             |
| 21           |          | 1    |                        |      |                        |      |              |             |
| 22           |          | 1    |                        |      |                        |      |              |             |
| 23           |          | 1    |                        |      |                        |      |              |             |
| 24           |          | 1    |                        |      |                        |      |              |             |
| 25           |          | 1    |                        |      |                        |      |              |             |
| 26           |          | 1    |                        |      |                        |      |              |             |
| 27           |          | 1    |                        |      |                        |      |              |             |
| 28           |          | 1    |                        |      |                        |      |              |             |
| 29           |          | 1    |                        |      |                        |      |              |             |
| 30           |          | 1    |                        |      |                        |      |              |             |
| 31           |          | 1    |                        |      |                        |      |              |             |
| 32           |          | 3    |                        |      |                        |      |              |             |
| 33           |          | 2    |                        |      |                        |      |              |             |
| 34           |          |      |                        |      |                        |      |              |             |
| 35           |          |      |                        |      |                        |      |              |             |
| 36           |          |      |                        |      |                        |      |              |             |
| 37           |          |      |                        |      |                        |      |              |             |
| 38           |          |      |                        |      |                        |      |              |             |
| 39           |          |      |                        |      |                        |      |              |             |
| 40           |          |      |                        |      |                        |      |              |             |
| 41           |          |      |                        |      |                        |      |              |             |
| 42           |          |      |                        |      |                        |      |              |             |
| 43           |          |      |                        |      |                        |      |              |             |
| 44           |          |      |                        |      |                        |      |              |             |
| 45           |          |      |                        |      |                        |      |              |             |
| 46           |          |      |                        |      |                        |      |              |             |
| 47           |          |      |                        |      |                        |      |              |             |
| 48           |          |      |                        |      |                        |      |              |             |
| 49           |          |      |                        |      |                        |      |              |             |
| 50           |          |      |                        |      |                        |      |              |             |
| 51           |          |      |                        |      |                        |      |              |             |
| 52           |          |      |                        |      |                        |      |              |             |
| 53           |          |      |                        |      |                        |      |              |             |
| 54           |          |      |                        |      |                        |      |              |             |
| 55           |          |      |                        |      |                        |      |              |             |
| 56           |          |      |                        |      |                        |      |              |             |
| 57           |          |      |                        |      |                        |      |              |             |
| 58           |          |      |                        |      |                        |      |              |             |
| 59           |          |      |                        |      |                        |      |              |             |
| 60           |          |      |                        |      |                        |      |              |             |
| 61           |          |      |                        |      |                        |      |              |             |
| 62           |          |      |                        |      |                        |      |              |             |
| 63           |          |      |                        |      |                        |      |              |             |
| 64           |          |      |                        |      |                        |      |              |             |
| 65           |          |      |                        |      |                        |      |              |             |
| 66           |          |      |                        |      |                        |      |              |             |
| 67           |          |      |                        |      |                        |      |              |             |
| 68           |          |      |                        |      |                        |      |              |             |
| 69           |          |      |                        |      |                        |      |              |             |
| 70           |          |      |                        |      |                        |      |              |             |
| 71           |          |      |                        |      |                        |      |              |             |
| 72           |          |      |                        |      |                        |      |              |             |
| 73           |          |      |                        |      |                        |      |              |             |
| 74           |          |      |                        |      |                        |      |              |             |
| 75           |          |      |                        |      |                        |      |              |             |
| 76           |          |      |                        |      |                        |      |              |             |
| 77           |          |      |                        |      |                        |      |              |             |
| 78           |          |      |                        |      |                        |      |              |             |
| 79           |          |      |                        |      |                        |      |              |             |
| 80           |          |      |                        |      |                        |      |              |             |
| 81           |          |      |                        |      |                        |      |              |             |
| 82           |          |      |                        |      |                        |      |              |             |
| 83           |          |      |                        |      |                        |      |              |             |
| 84           |          |      |                        |      |                        |      |              |             |
| 85           |          |      |                        |      |                        |      |              |             |
| 86           |          |      |                        |      |                        |      |              |             |
| 87           |          |      |                        |      |                        |      |              |             |
| 88           |          |      |                        |      |                        |      |              |             |
| 89           |          |      |                        |      |                        |      |              |             |
| 90           |          |      |                        |      |                        |      |              |             |
| 91           |          |      |                        |      |                        |      |              |             |
| 92           |          |      |                        |      |                        |      |              |             |
| 93           |          |      |                        |      |                        |      |              |             |
| 94           |          |      |                        |      |                        |      |              |             |
| 95           |          |      |                        |      |                        |      |              |             |
| 96           |          |      |                        |      |                        |      |              |             |
| 97           |          |      |                        |      |                        |      |              |             |
| 98           |          |      |                        |      |                        |      |              |             |
| 99           |          |      |                        |      |                        |      |              |             |
| 100          |          |      |                        |      |                        |      |              |             |
| TOTAL IND.   |          | ↓    |                        | ↓    |                        | ↓    |              |             |
| TOTAL DEP.   |          | ←    |                        | ←    |                        | ←    |              |             |
| TOTAL CLAIMS |          |      |                        |      |                        |      |              |             |

\* MAY BE USED FOR ADDITIONAL CLAIMS OR ADMENDMENTS

FORM PTO-2022 (1-98)

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

| CLAIMS ONLY BEST AVAILABLE COPY |          |      |                        |      |                        |      | SERIAL NO.   | FILING DATE |      |      |      |      |      |
|---------------------------------|----------|------|------------------------|------|------------------------|------|--------------|-------------|------|------|------|------|------|
| CLAIMS                          |          |      |                        |      |                        |      |              |             |      |      |      |      |      |
|                                 | AS FILED |      | AFTER<br>1st AMENDMENT |      | AFTER<br>2nd AMENDMENT |      |              | ☆           |      | ☆    |      | ☆    |      |
|                                 | IND.     | DEP. | IND.                   | DEP. | IND.                   | DEP. |              | IND.        | DEP. | IND. | DEP. | IND. | DEP. |
| 1                               |          |      |                        |      |                        |      | 51           |             |      |      |      |      |      |
| 2                               |          |      |                        |      |                        |      | 52           |             |      |      |      |      |      |
| 3                               |          |      |                        |      |                        |      | 53           |             |      |      |      |      |      |
| 4                               |          |      |                        |      |                        |      | 54           |             |      |      |      |      |      |
| 5                               |          |      |                        |      |                        |      | 55           |             |      |      |      |      |      |
| 6                               |          |      |                        |      |                        |      | 56           |             |      |      |      |      |      |
| 7                               |          |      |                        |      |                        |      | 57           |             |      |      |      |      |      |
| 8                               |          |      |                        |      |                        |      | 58           |             |      |      |      |      |      |
| 9                               |          |      |                        |      |                        |      | 59           |             |      |      |      |      |      |
| 10                              |          |      |                        |      |                        |      | 60           |             |      |      |      |      |      |
| 11                              |          |      |                        |      |                        |      | 61           |             |      |      |      |      |      |
| 12                              |          |      |                        |      |                        |      | 62           |             |      |      |      |      |      |
| 13                              |          |      |                        |      |                        |      | 63           |             |      |      |      |      |      |
| 14                              |          |      |                        |      |                        |      | 64           |             |      |      |      |      |      |
| 15                              |          |      |                        |      |                        |      | 65           |             |      |      |      |      |      |
| 16                              |          |      |                        |      |                        |      | 66           |             |      |      |      |      |      |
| 17                              |          |      |                        |      |                        |      | 67           |             |      |      |      |      |      |
| 18                              |          |      |                        |      |                        |      | 68           |             |      |      |      |      |      |
| 19                              |          |      |                        |      |                        |      | 69           |             |      |      |      |      |      |
| 20                              |          |      |                        |      |                        |      | 70           |             |      |      |      |      |      |
| 21                              |          |      |                        |      |                        |      | 71           |             |      |      |      |      |      |
| 22                              |          |      |                        |      |                        |      | 72           |             |      |      |      |      |      |
| 23                              |          |      |                        |      |                        |      | 73           |             |      |      |      |      | 54   |
| 24                              |          |      |                        |      |                        |      | 74           |             |      |      |      |      | 3    |
| 25                              |          |      |                        |      |                        |      | 75           |             | 2    |      |      |      | 62   |
| 26                              |          |      |                        |      |                        |      | 76           |             | 2    |      |      |      |      |
| 27                              |          |      |                        |      |                        |      | 77           |             | 2    |      |      |      |      |
| 28                              |          |      |                        |      |                        |      | 78           |             | 2    |      |      |      |      |
| 29                              |          |      |                        |      |                        |      | 79           |             | 2    |      |      |      |      |
| 30                              |          |      |                        |      |                        |      | 80           |             | 2    |      |      |      |      |
| 31                              |          |      |                        |      |                        |      | 81           |             | 2    |      |      |      |      |
| 32                              |          |      |                        |      |                        |      | 82           |             | 2    |      |      |      |      |
| 33                              |          |      |                        |      |                        |      | 83           |             | 2    |      |      |      |      |
| 34                              |          |      |                        |      |                        |      | 84           |             | 2    |      |      |      |      |
| 35                              |          |      |                        |      |                        |      | 85           |             | 2    |      |      |      |      |
| 36                              |          |      |                        |      |                        |      | 86           |             | 2    |      |      |      |      |
| 37                              |          |      |                        |      |                        |      | 87           |             | 2    |      |      |      |      |
| 38                              |          |      |                        |      |                        |      | 88           |             | 2    |      |      |      |      |
| 39                              |          |      |                        |      |                        |      | 89           |             | 2    |      |      |      |      |
| 40                              |          |      |                        |      |                        |      | 90           |             | 2    |      |      |      |      |
| 41                              |          |      |                        |      |                        |      | 91           |             | 2    |      |      |      |      |
| 42                              |          |      |                        |      |                        |      | 92           |             | 2    |      |      |      |      |
| 43                              |          |      |                        |      |                        |      | 93           |             | 2    |      |      |      |      |
| 44                              |          |      |                        |      |                        |      | 94           |             | 2    |      |      |      |      |
| 45                              |          |      |                        |      |                        |      | 95           |             | 2    |      |      |      |      |
| 46                              |          |      |                        |      |                        |      | 96           |             | 2    |      |      |      |      |
| 47                              |          |      |                        |      |                        |      | 97           |             | 2    |      |      |      |      |
| 48                              |          |      |                        |      |                        |      | 98           |             | 2    |      |      |      |      |
| 49                              |          |      |                        |      |                        |      | 99           |             | 2    |      |      |      |      |
| 50                              |          |      |                        |      |                        |      | 100          |             | 2    |      |      |      |      |
| TOTAL IND.                      |          |      |                        |      |                        |      | TOTAL IND.   | 3           |      |      |      |      |      |
| TOTAL DEP.                      |          |      |                        |      |                        |      | TOTAL DEP.   | 87          |      |      |      |      |      |
| TOTAL CLAIMS                    |          |      |                        |      |                        |      | TOTAL CLAIMS | 90          |      |      |      |      |      |

\* MAY BE USED FOR ADDITIONAL CLAIMS OR ADMENDMENTS

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office